Winston XSpression SKS - ROU (200637288)
Report QDP Test

Annex to Test Report 4867215
13th July 2020

SGS
Critical Factors - Decision Tree (Principles)

Aggregated view on critical factors (matrix) leads to the risk assessment

Without Characterising Flavour

Tobacco Universe Positioning

Target: diagnostics of similarities and/or differentiation against tobacco flavours in general and/or against defined benchmark.

Requires Further Investigation

uncritical

With Characterising Flavour

Target: detection of perceivable non tobacco flavours within the overall flavour of one product.

Complementary Factors

Without Characterising Flavour

Target: determination of relative role of perceivable non tobacco flavours within the overall flavour of one product.

With Characterising Flavour

lesser critical

critical

SGS
Report QDP sniffing test (TPD “Characterising Flavours“)

Objective
Classification of the samples having “Characterising Flavours” or not for risk assessment.

Details of Samples
• Winston XSpression SKS - ROU (200637288)

Procedure
• Method: QDP sniffing assessment
• Panel: SGS Panel, Hamburg
• Number of Panelists: 10
• Number of data points per sample: 30
• Week of testing: 6 - 10 July 2020

Test Execution
• Outsourced to external agency SGS (Hamburg/Germany) to avoid conflict of interest and to build on sensory expertise and experience of independent third party, highly qualified as globally operating Quality Assurance Service Provider.
• SGS works according to the applicable Quality Management Systems: ISO 17025, GMP, GLP, GEP, ISO: 9001/9100, 17021/17065 and 17020.

Result
Aggregated view on critical factors - Positioning, Detection, Dominance - following the Decision Tree results in the classification:

Winston XSpression SKS - ROU -> RISK 3
**Winston XSpression SKS - ROU: Result - ** Criterion 1

**Scope of criterion:** overall flavour perception of a product  
**Reference:** overall flavour from tobaccos in general  
**Aim:** diagnostics of similarities/differentiation against tobacco flavours in general  
**Evaluation:** Principle Component Analysis (PCA) and Cluster Analysis

**Actual Results**

**PCA**
Winston XSpression SKS - ROU  
With characterising flavour - critical

**Cluster Analysis**
Winston XSpression SKS - ROU  
With characterising flavour - critical
Winston XSpresion SKS - ROU: Result - **Criterion 1 – PCA**

**Segment: Rather non-tobacco typical distinctive characteristics**

Biplot (Achsenn D1 und D2: 86.61 %)

- **Unconventional tobacco**
  - no characterizing flavours in that group

- **Conventional tobacco**
  - no characterizing flavours in that group

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**SGS**
Winston XSpersion SKS - ROU: Result - **Criterion 1 – Cluster Analysis**

Assigned to Cluster 1 (Rather non-tobacco typical distinctive characteristics)

**Cluster 1**
- TOP_Nib_Tob
- TOP_Neep_Lumber
- TOP_Slight_Tob
- Winston XSpersion SKS - American

**Cluster 2**
- TNT1
- TNT5
- TNT7
- Lady's_Cigarette_Red
- Lady's_Cigarette_Light
- Lady's_Cigarette_Light_AF

**Cluster 3**
- TNT5
- TNT7
- TNT9
- TNT11
- TNT15
- TNT23
- TNT28
- TNT31
- TNT33
- TNT34
- TNT35
- TNT36
- TNT37
- TNT38
- TNT39
- TNT40
- TNT41
- TNT42

**Dendrogram**

**UnRelieheit**
Winston XSpresison SKS - ROU: Result - **Criterion 2**

2 of the non tobacco flavours have a mean value > 1 - Fruity and Citrus

**Scope of criterion:** perception of individual, distinctive flavour directions

**Reference:** identified list of tobacco typical and tobacco non typical flavour directions

**Aim:** split of overall flavour perception into individual flavours contributing

**Evaluation:** perceived absolute intensities of distinctive flavour directions

**Guiding Rules**

Rules for classification as "characterising flavour"

- non tobacco flavour mean value < 1 - less critical
- non tobacco flavour mean value > 1 - critical

**Actual Results**

Mean value on 0-5 scale

<table>
<thead>
<tr>
<th>Sample</th>
<th>Vanilla</th>
<th>Caramel</th>
<th>Fruity</th>
<th>Floral</th>
<th>Minty</th>
<th>Mocha</th>
<th>Civic</th>
<th>Licorice</th>
<th>Spicy</th>
<th>Alcoholic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winston XSpresison SKS - Romania</td>
<td>0.1</td>
<td>0.47</td>
<td>0.17</td>
<td>0.43</td>
<td>2.80</td>
<td>0.40</td>
<td>0.53</td>
<td>1.13</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Lucky Strike Red</td>
<td>0.17</td>
<td>0.08</td>
<td>0.19</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
</tr>
</tbody>
</table>

Winston XSpresison SKS - ROU

- all non tobacco flavours > 1 - Critical
- all non tobacco flavours < 1 - Non Critical
### Winston XSpresion SKS - ROU: Result - **Criterion 3**

4 of the top 5 flavours are non tobacco Vanilla, Fruity, Minty and Citrus

**Scope of criterion:** perceived intensities of tobacco non typical flavours

**Reference:** perceived intensities of tobacco typical flavours in the same product

**Aim:** identify relevance of individual flavours contributing to overall flavour perception

**Evaluation:** Ranking of relative intensities of individual flavours contributing to the overall flavour perception

**Guiding Rules**

**Top 5 Ranking**

**Rules for classification as "no characterising flavour"**

- Tobacco typical flavour has to be on top 1 ranking position (highest perceived intensity)
- Tobacco typical flavour has to be at least 1.0 scale units higher in intensity than any non tobacco typical flavour
- Top 5 flavour intensities must be dominated by tobacco typical flavours (3 of the 5 most intensive flavours have to be tobacco typical)

### Actual Results

<table>
<thead>
<tr>
<th>Sample</th>
<th>Tobacco</th>
<th>Smoky</th>
<th>Roasted</th>
<th>Haylike</th>
<th>BlackCocoa</th>
<th>Woody</th>
<th>Earth</th>
<th>Animal</th>
<th>Vanil</th>
<th>Caramel</th>
<th>Honey</th>
<th>Fruity</th>
<th>Fizzy</th>
<th>Minty</th>
<th>Cinn</th>
<th>Caco</th>
<th>Licor</th>
<th>Sols</th>
<th>Alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winston XSpresion SKS - Romania</td>
<td>1.63</td>
<td>0.07</td>
<td>0.10</td>
<td>0.13</td>
<td>0.10</td>
<td>0.07</td>
<td>0.00</td>
<td>0.47</td>
<td>0.17</td>
<td>0.43</td>
<td>2.84</td>
<td>0.40</td>
<td>0.33</td>
<td>1.33</td>
<td>0.00</td>
<td>0.01</td>
<td>0.07</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>Lucky Strike Red</td>
<td>4.17</td>
<td>0.00</td>
<td>0.00</td>
<td>0.31</td>
<td>1.03</td>
<td>0.17</td>
<td>0.04</td>
<td>0.06</td>
<td>0.08</td>
<td>0.08</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

**SGS**

*Winston XSpresion SKS - ROU:*

Top ranking position is not tobacco, and 4 of the top 5 flavours are non tobacco Therefore the product is **critical**

*All top 5 flavours are in the tobacco typical flavour zone Therefore Lucky Strike Red is **uncritical**.*
For any questions please contact:

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Hamburg, 16.02.2020
Winston XSpression DS – CZ (200637289)
Report QDP Test

Annex to Test Report 4867216
13th July 2020

SGS
Critical Factors - Decision Tree (Principles)

Aggregated view on critical factors (matrix) leads to the risk assessment

Without Characterising Flavour

uncritical

Require further Investigation

critical

With Characterising Flavour

Target: detection of perceivable non tobacco flavours within the overall flavour of one product.

Complementary Factors

Target: determination of relative role of perceivable non tobacco flavours within the overall flavour of one product.

Without Characterising Flavour

less critical

critical

With Characterising Flavour

Target: diagnostics of similarities and/or differentiation against tobacco flavours in general and/or against defined benchmark.

Tobacco Universe Positioning

SGS
Report QDP sniffing test (TPD “Characterising Flavours“)

Objective
Classification of the samples having “Characterising Flavours” or not for risk assessment.

Details of Samples
- Winston Xpression DS – CZ (200637289)

Procedure
- Method: QDP sniffing assessment
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Result
Aggregated view on critical factors - Positioning, Detection, Dominance - following the Decision Tree results in the classification:

Winston XExpression DS – CZ -> RISK 3
Tobacco Universe

Positioining

Actual Results

Winston XSpersion DS – CZ: Result - **Criterion 1**

**Scope of criterion:** overall flavour perception of a product

**Reference:** overall flavour from tobaccos in general

**Aim:** diagnostics of similarities/differentiation against tobacco flavours in general

**Evaluation:** Principle Component Analysis (PCA) and Cluster Analysis

**Actual Results**

**PCA**

Winston XSpersion DS – CZ  
With characterising flavour – critical

**Cluster Analysis**

Winston XSpersion DS – CZ  
With characterising flavour – critical

SGS
Winston XSpresison DS – CZ: Result - **Criterion 1 – PCA**

**Segment: Rather non-tobacco typical distinctive characteristics**

Biplot (Axes D1 and D2: 87.18%)

**Unconventional tobacco**

No characterizing flavours in that group

**Conventional tobacco**

No characterizing flavours in that group
Winston XSpression DS – CZ: Result - **Criterion 1 – Cluster Analysis**

Assigned to Cluster 1 (Rather non-tobacco typical distinctive characteristics)
Winston XSpresion DS – CZ: Result - **Criterion 2**

1 of the non tobacco flavours has a mean value > 1 – Fruity

**Scope of criterion:** perception of individual, distinctive flavour directions

**Reference:** identified list of tobacco typical and tobacco non typical flavour directions

**Aim:** split of overall flavour perception into individual flavours contributing

**Evaluation:** perceived absolute intensities of distinctive flavour directions

### Guiding Rules

Rules for classification as "characterising flavour"

- non tobacco flavour mean value < 1
- non tobacco flavour mean value > 1

- less critical
- critical

### Actual Results

Mean value on 0-5 scale

<table>
<thead>
<tr>
<th>Sample</th>
<th>Roaste</th>
<th>Wood</th>
<th>Earth</th>
<th>Animal</th>
<th>Vanilla</th>
<th>Caramel</th>
<th>Honey</th>
<th>Fruity</th>
<th>Floral</th>
<th>Minty</th>
<th>Cherry</th>
<th>Cacao</th>
<th>Licorice</th>
<th>Spicy</th>
<th>Alcoholic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winston XSpresion DS - Czech</td>
<td>0.40</td>
<td>0.20</td>
<td>0.23</td>
<td>2.00</td>
<td>0.37</td>
<td>0.33</td>
<td>0.63</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.30</td>
<td>0.07</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lucky Strike Red</td>
<td>0.04</td>
<td>0.08</td>
<td>0.19</td>
<td>0.03</td>
<td>0.00</td>
<td>0.00</td>
<td>0.03</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Winston XSpresion DS – CZ**

- all non tobacco flavours > 1: **Critical**

**Lucky Strike Red**

- all non tobacco flavours < 1: **Non Critical**
Winston XSpession DS – CZ: Result - **Criterion 3**

4 of the top 7 flavours are non tobacco Vanilla, Fruity, Floral and Citrus

**Scope of criterion:** perceived intensities of tobacco non typical flavours

**Reference:** perceived intensities of tobacco typical flavours in the same product

**Aim:** identify relevance of individual flavours contributing to overall flavour perception

**Evaluation:** Ranking of relative intensities of individual flavours contributing to the overall flavour perception

**Rules for classification:**
- Tobacco typical flavour has to be on top 1 ranking position (highest perceived intensity)
- Tobacco typical flavour has to be at least 1.0 scale units higher in intensity than any non tobacco typical flavour
- Top 5 flavour intensities must be dominated by tobacco typical flavours (3 of the 5 most intensive flavours have to be tobacco typical)

**Actual Results**

<table>
<thead>
<tr>
<th>Sample</th>
<th>Tobacco typical</th>
<th>Non tobacco typical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winston XSpession DS – CZ:</td>
<td>Sample</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tobacco Smoky</td>
<td>Vanilla</td>
</tr>
<tr>
<td></td>
<td>Roasted Herbal</td>
<td>Caramel</td>
</tr>
<tr>
<td></td>
<td>Black Pepper</td>
<td>Heiroc</td>
</tr>
<tr>
<td></td>
<td>Woodsy</td>
<td>Fruity</td>
</tr>
<tr>
<td></td>
<td>Earthy</td>
<td>Humidor</td>
</tr>
<tr>
<td></td>
<td>Animal</td>
<td>Citrus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tobacco</td>
</tr>
<tr>
<td>Lucky Strike Red</td>
<td>4.17</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>0.67</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>0.19</td>
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<tr>
<td></td>
<td>0.17</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Winston XSpession DS – CZ:** Top ranking position is tobacco, but its intensity is not 1.0 scale units higher than the value of 'Fruity', also 4 of the top 7 flavours are non tobacco

Therefore the product is rather **critical**

**Lucky Strike Red:** All top 5 flavours are in the tobacco typical flavour zone

Therefore **Lucky Strike Red** is **uncritical**
any questions please contact:
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SGS